

8. The composition of claim 1, wherein the β -boswellic acid, aceryl- β -boswellic acid, 11-keto- β -boswellic acid and aceryl-11-keto- β -boswellic acid are derived from any natural source.

9. A composition comprising three boswellic acids selected from the group consisting of β -boswellic acid, aceryl- β -boswellic acid, 11-keto- β -boswellic acid and aceryl-11-keto- β -boswellic acid, wherein, based on the total weight of the composition, the amount of β -boswellic acid is at least 5% by weight, the amount of aceryl- β -boswellic acid is at least 5% by weight, the amount of 11-keto- β -boswellic acid is at least 5% by weight, and the amount of aceryl-11-keto- β -boswellic acid is at least 5% by weight.

10. The composition of claim 9, wherein the amount of β -boswellic acid is 14 to 65% by weight, the amount of aceryl- β -boswellic acid is 5 to 65% by weight, the amount of 11-keto- β -boswellic acid is 5 to 60% by weight, and the amount of aceryl-11-keto- β -boswellic acid is 5 to 60% by weight.

11. The composition of claim 10, wherein the amount of β -boswellic acid is 14 to 55% by weight, the amount of acetyl- β -boswellic acid is 10 to 55% by weight, the amount of 11-keto- β -boswellic acid is 5 to 50% by weight, and the amount of acetyl-11-keto- β -boswellic acid is 5 to 50% by weight.

12. The composition of claim 11, wherein the amount of β -boswellic acid is 14 to 35% by weight, the amount of acetyl- β -boswellic acid is 10 to 35% by weight, the amount of 11-keto- β -boswellic acid is 5 to 40% by weight, and the amount of acetyl-11-keto- β -boswellic acid is 5 to 40% by weight.

13. The composition of claim 9, wherein the β -boswellic acid, aceryl- β -boswellic acid, 11-keto- β -boswellic acid and aceryl-11-keto- β -boswellic acid are derived from any natural source.

14. A composition comprising two boswellic acids selected from the group consisting of β -boswellic acid, aceryl- β -boswellic acid, 11-keto- β -boswellic acid and aceryl-11-keto- β -boswellic acid, wherein, based on the total weight of the composition, the amount of β -boswellic acid is at least 5% by weight, the amount of aceryl- β -boswellic acid is at least 5% by weight, the amount of 11-keto- β -boswellic acid is at least 5% by weight, and the amount of aceryl-11-keto- β -boswellic acid is at least 5% by weight.

acid is at least 5% by weight, and the amount of aceryl-11-keto- β -boswellic acid is at least 5% by weight.

15. The composition of claim 14, wherein the amount of β -boswellic acid is 5 to 95% by weight, the amount of aceryl- β -boswellic acid is 5 to 95% by weight, the amount of 11-keto- β -boswellic acid is 5 to 95% by weight, and the amount of aceryl-11-keto- β -boswellic acid is 5 to 95% by weight.

16. The composition of claim 15, wherein the amount of β -boswellic acid is 30 to 70% by weight, the amount of aceryl- β -boswellic acid is 30 to 70% by weight, the amount of 11-keto- β -boswellic acid is 30 to 70% by weight, and the amount of aceryl-11-keto- β -boswellic acid is 30 to 70% by weight.

17. The composition of claim 16, wherein the amount of β -boswellic acid is 40 to 60% by weight, the amount of aceryl- β -boswellic acid is 40 to 60% by weight, the amount of 11-keto- β -boswellic acid is 40 to 60% by weight, and the amount of aceryl-11-keto- β -boswellic acid is 40 to 60% by weight.

18. The composition of claim 14, wherein the β -boswellic acid, aceryl- β -boswellic acid, 11-keto- β -boswellic acid and aceryl-11-keto- β -boswellic acid are derived from any natural source.

19. A composition comprising boswellic acids, wherein the boswellic acids consist of three substances selected from the group consisting of β -boswellic acid, aceryl- β -boswellic acid, 11-keto- β -boswellic acid and aceryl-11-keto- β -boswellic acid, wherein, based on the total weight of the composition, the amount of β -boswellic acid is at least 5% by weight, the amount of aceryl- β -boswellic acid is at least 5% by weight, the amount of 11-keto- β -boswellic acid is at least 5% by weight, and the amount of aceryl-11-keto- β -boswellic acid is at least 5% by weight.

20. The composition of claim 19, wherein the amount of β -boswellic acid is 5 to 65% by weight, the amount of aceryl- β -boswellic acid is 5 to 65% by weight, the amount of 11-keto- β -boswellic acid is 5 to 65% by weight, and the amount of aceryl-11-keto- β -boswellic acid is 5 to 65% by weight.

21. The composition of claim 20, wherein the amount of β -boswellic acid is 15 to 55% by weight, the amount of aceryl- β -boswellic acid is 15 to 55% by

weight, the amount of 11-keto- β -boswellic acid is 15 to 55% by weight, and the amount of aceryl-11-keto- β -boswellic acid is 15 to 55% by weight.

22. The composition of claim 21, wherein the amount of β -boswellic acid is 20 to 40% by weight, the amount of aceryl- β -boswellic acid is 20 to 40% by weight, the amount of 11-keto- β -boswellic acid is 20 to 40% by weight, and the amount of aceryl-11-keto- β -boswellic acid is 20 to 40% by weight.

23. The composition of claim 19, wherein the β -boswellic acid, aceryl- β -boswellic acid, 11-keto- β -boswellic acid and aceryl-11-keto- β -boswellic acid are derived from any natural source.

24. A composition comprising boswellic acids, wherein the boswellic acids consist of two substances selected from the group consisting of β -boswellic acid, aceryl- β -boswellic acid, 11-keto- β -boswellic acid and aceryl-11-keto- β -boswellic acid, wherein, based on the total weight of the boswellic acids, the amount of β -boswellic acid is at least 5% by weight, the amount of aceryl- β -boswellic acid is at least 5% by weight, the amount of 11-keto- β -boswellic acid is at least 5% by weight, and the amount of aceryl-11-keto- β -boswellic acid is at least 5% by weight.

25. The composition of claim 24, wherein the amount of β -boswellic acid is 10 to 90% by weight, the amount of aceryl- β -boswellic acid is 10 to 90% by weight, the amount of 11-keto- β -boswellic acid is 10 to 90% by weight, and the amount of aceryl-11-keto- β -boswellic acid is 10 to 90% by weight.

26. The composition of claim 25, wherein the amount of β -boswellic acid is 20 to 80% by weight, the amount of aceryl- β -boswellic acid is 20 to 80% by weight, the amount of 11-keto- β -boswellic acid is 20 to 80% by weight, and the amount of aceryl-11-keto- β -boswellic acid is 20 to 80% by weight.

27. The composition of claim 26, wherein the amount of β -boswellic acid is 30 to 70% by weight, the amount of aceryl- β -boswellic acid is 30 to 70% by weight, the amount of 11-keto- β -boswellic acid is 30 to 70% by weight, and the amount of aceryl-11-keto- β -boswellic acid is 30 to 70% by weight.

28. The composition of claim 27, wherein the amount of β -boswellic acid is 40 to 60% by weight, the amount of aceryl- β -boswellic acid is 40 to 60% by

weight, the amount of 11-keto- β -boswellic acid is 40 to 60% by weight, and the amount of aceryl-11-keto- β -boswellic acid is 40 to 60% by weight.

29. The composition of claim 9, wherein two of the three boswellic acids are 11-keto- β -boswellic acid and aceryl-11-keto- β -boswellic acid.

30. The composition of claim 9, wherein two of the three boswellic acids are 11-keto- β -boswellic acid and aceryl-11-keto- β -boswellic acid.

31. The composition of claim 11, wherein two of the three boswellic acids are 11-keto- β -boswellic acid and aceryl-11-keto- β -boswellic acid.

32. The composition of claim 12, wherein two of the three boswellic acids are 11-keto- β -boswellic acid and aceryl-11-keto- β -boswellic acid.

33. The composition of claim 14, wherein the two boswellic acids are 11-keto- β -boswellic acid and aceryl-11-keto- β -boswellic acid.

34. The composition of claim 15, wherein the two boswellic acids are 11-keto- β -boswellic acid and aceryl-11-keto- β -boswellic acid.

35. The composition of claim 16, wherein the two boswellic acids are 11-keto- β -boswellic acid and aceryl-11-keto- β -boswellic acid.

36. The composition of claim 17, wherein the two boswellic acids are 11-keto- β -boswellic acid and aceryl-11-keto- β -boswellic acid.

37. The composition of claim 19, wherein two of the three substances are 11-keto- β -boswellic acid and aceryl-11-keto- β -boswellic acid.

38. The composition of claim 20, wherein two of the three substances are 11-keto- β -boswellic acid and aceryl-11-keto- β -boswellic acid.

39. The composition of claim 21, wherein two of the three substances are 11-keto- β -boswellic acid and aceryl-11-keto- β -boswellic acid.

40. The composition of claim 22, wherein two of the three substances are 11-keto- β -boswellic acid and aceryl-11-keto- β -boswellic acid.

41. The composition of claim 24, wherein the two substances are 11-keto- β -boswellic acid and aceryl-11-keto- β -boswellic acid.

42. The composition of claim 25, wherein the two substances are 11-keto- β -boswellic acid and aceryl-11-keto- β -boswellic acid.

43. The composition of claim 26, wherein the two substances are 11-keto- β -boswellic acid and aceryl-11-keto- β -boswellic acid.

44. The composition of claim 27, wherein the two substances are 11-keto- β -boswellic acid and aceryl-11-keto- β -boswellic acid.

5 45. A method for inhibition of DNA, RNA and/or protein synthesis in a human or animal in need of the inhibition, comprising a step of administering a DNA, RNA and/or protein synthesis inhibition effective amount of a composition to said human or animal, wherein the composition comprises β -boswellic acid, aceryl- β -boswellic acid, 11-keto- β -boswellic acid and aceryl-11-keto- β -boswellic acid.

10 46. The method of claim 45, wherein the composition comprises β -boswellic acid of at least 12% by weight, acetyl- β -boswellic acid of at least 5% by weight, 11-keto- β -boswellic acid of at least 1% by weight and aceryl-11-keto- β -boswellic acid of at least 1% by weight.

15 47. The method of claim 46, wherein the composition comprises β -boswellic acid of 12 to 35% by weight, acetyl- β -boswellic acid of 5 to 35% by weight, 11-keto- β -boswellic acid of 5 to 45% by weight and aceryl-11-keto- β -boswellic acid of 5 to 45% by weight.

20 48. A method for irreversible inhibition of DNA synthesis in a human or animal in need of the inhibition, comprising a step of administering a DNA inhibition effective amount of a composition to said human or animal, wherein the composition comprises β -boswellic acid, acetyl- β -boswellic acid, 11-keto- β -boswellic acid and aceryl-11-keto- β -boswellic acid.

25 49. The method of claim 48, wherein the composition comprises β -boswellic acid of at least 12% by weight, acetyl- β -boswellic acid of at least 5% by weight, 11-keto- β -boswellic acid of at least 1% by weight and aceryl-11-keto- β -boswellic acid of at least 1% by weight.

30 50. The method of claim 49, wherein the composition comprises β -boswellic acid of 12 to 35% by weight, acetyl- β -boswellic acid of 5 to 35% by weight, 11-keto- β -boswellic acid of 5 to 45% by weight and aceryl-11-keto- β -boswellic acid of 5 to 45% by weight.

51. A method for the prevention of a lymphoproliferative disease in a human or animal in need of the prevention, comprising a step of administering a lymphoproliferative disease prevention effective amount of a composition to said human or animal, wherein the composition comprises β -boswellic acid, aceryl- β -boswellic acid, 11-keto- β -boswellic acid and aceryl-11-keto- β -boswellic acid.

52. The method of claim 51, wherein the composition comprises β -boswellic acid of at least 12% by weight, aceryl- β -boswellic acid of at least 5% by weight, 11-keto- β -boswellic acid of at least 1% by weight and aceryl-11-keto- β -boswellic acid of at least 1% by weight.

53. The method of claim 52, wherein the composition comprises β -boswellic acid of 12 to 35% by weight, aceryl- β -boswellic acid of 5 to 35% by weight, 11-keto- β -boswellic acid of 5 to 45% by weight and aceryl-11-keto- β -boswellic acid of 5 to 45% by weight.

54. The method of claim 51, wherein the lymphoproliferative disease is leukemia or lymphoma.

55. A method for the treatment of a lymphoproliferative disease in a human or animal in need of the treatment, comprising a step of administering a lymphoproliferative disease treatment effective amount of a composition to said human or animal, wherein the composition comprises β -boswellic acid, aceryl- β -boswellic acid, 11-keto- β -boswellic acid and aceryl-11-keto- β -boswellic acid.

56. The method of claim 55, wherein the composition comprises β -boswellic acid of at least 12% by weight, aceryl- β -boswellic acid of at least 5% by weight, 11-keto- β -boswellic acid of at least 1% by weight and aceryl-11-keto- β -boswellic acid of at least 1% by weight.

57. The method of claim 56, wherein the composition comprises β -boswellic acid of 12 to 35% by weight, aceryl- β -boswellic acid of 5 to 35% by weight, 11-keto- β -boswellic acid of 5 to 45% by weight and aceryl-11-keto- β -boswellic acid of 5 to 45% by weight.

58. The method of claim 55, wherein the lymphoproliferative disease is leukemia or lymphoma.

59. A method for the prevention of an autoimmune disease in a human or animal in need of the prevention, comprising a step of administering an autoimmune disease prevention effective amount of a composition to said human or animal, wherein the composition comprises β -boswellic acid, acetyl- β -boswellic acid, 11-keto- β -boswellic acid and acetyl-11-keto- β -boswellic acid.

60. The method of claim 59, wherein the composition comprises β -boswellic acid of at least 12% by weight, acetyl- β -boswellic acid of at least 5% by weight, 11-keto- β -boswellic acid of at least 1% by weight and acetyl-11-keto- β -boswellic acid of at least 1% by weight.

61. The method of claim 60, wherein the composition comprises β -boswellic acid of 12 to 35% by weight, acetyl- β -boswellic acid of 5 to 35% by weight, 11-keto- β -boswellic acid of 5 to 45% by weight and acetyl-11-keto- β -boswellic acid of 5 to 45% by weight.

62. The method of claim 59, wherein the autoimmune disease is psoriasis, sarcoidosis, systemic lupus erythematosus, Grave's disease, Hashimoto's thyroiditis, silent thyroiditis, Crohn's disease, Goodpasture syndrome, insulin-dependent diabetes mellitus, insulin-resistant diabetes mellitus, myasthenia gravis, Addison's disease, idiopathic hypoparathyroidism, idiopathic thrombocytopenic purpura, autoimmune hemolytic anemia, rheumatoid arthritis or scleroderma.

63. A method for the treatment of an autoimmune disease in a human or animal in need of the treatment, comprising a step of administering an autoimmune disease treatment effective amount of a composition to said human or animal, wherein the composition comprises β -boswellic acid, acetyl- β -boswellic acid, 11-keto- β -boswellic acid and acetyl-11-keto- β -boswellic acid.

64. The method of claim 63, wherein the composition comprises β -boswellic acid of at least 12% by weight, acetyl- β -boswellic acid of at least 5% by weight, 11-keto- β -boswellic acid of at least 1% by weight and acetyl-11-keto- β -boswellic acid of at least 1% by weight.

65. The method of claim 64, wherein the composition comprises β -boswellic acid of 12 to 35% by weight, acetyl- β -boswellic acid of 5 to 35% by

weight, 11-keto- β -boswellic acid of 5 to 45% by weight and acetyl-11-keto- β -boswellic acid of 5 to 45% by weight.

66. The method of claim 63, wherein the autoimmune disease is psoriasis, sarcoidosis, systemic lupus erythematosus, Grave's disease, Hashimoto's thyroiditis, silent thyroiditis, Crohn's disease, Goodpasture syndrome, insulin-dependent diabetes mellitus, insulin-resistant diabetes mellitus, myasthenia gravis, Addison's disease, idiopathic hypoparathyroidism, idiopathic thrombocytopenic purpura, autoimmune hemolytic anemia, rheumatoid arthritis or scleroderma.

67. A process of obtaining a total organic acids extract from *Boswellia serrata*, wherein the total organic acids extract comprises boswellic acids, said process comprising the following steps:

- (1) providing a *Boswellia serrata* component;
- (2) extracting the component with a C_1 - C_6 alcohol to obtain an alcohol extract;
- (3) removing the C_1 - C_6 alcohol from the alcohol extract to obtain a liquid;
- (4) treating the liquid with an alkaline substance to obtain an alkaline liquid;
- (5) washing the alkaline liquid with an organic solvent;
- (6) removing the organic solvent to obtain an aqueous liquid; and thereafter
- (7) treating the aqueous liquid with an acid to obtain the total organic acids extract as a precipitate.

68. The process of claim 67, wherein the *Boswellia serrata* component is the gum from *Boswellia serrata*.

69. The process of claim 67, wherein the C_1 - C_6 alcohol in step (2) is isopropyl alcohol.

70. The process of claim 67, wherein said alkaline substance is KOH and said liquid in step (4) is treated with KOH at pH>9.5.

71. The process of claim 67, wherein said aqueous liquid in step (7) is treated with hydrochloric acid at about pH 3 to 4 to obtain the precipitate.

72. The process of claim 67, wherein the precipitate is washed with water and dried at a temperature less than about 50°C.

73. The process of claim 67, wherein the organic solvent is ethyl acetate.

74. A total organic acids extract from *Boswellia serrata* obtained by the process of claim 67.

75. A process of obtaining boswellic acids comprising the following steps:

(a) providing a *Boswellia serrata* component;

(b) extracting said *Boswellia serrata* component with carbon dioxide to obtain a fluid extract; and

(c) removing carbon dioxide from the fluid extract to obtain the boswellic acids.

76. The process of claim 75, wherein the *Boswellia serrata* component is a gum from *Boswellia serrata*.

77. The process of claim 75, wherein the extracting in step (b) is performed with subcritical extraction.

78. The process of claim 75, wherein the extracting in step (b) is performed with supercritical extraction.

79. A method for the treatment of a tumor in a human or animal in need of the treatment by administering a tumor treating effective amount of a composition to said human or animal, wherein the composition comprises β -boswellic acid, acetyl- β -boswellic acid, 11-keto- β -boswellic acid and acetyl-11-keto- β -boswellic acid.

80. The method of claim 79, wherein the composition comprises β -boswellic acid of at least 12% by weight, acetyl- β -boswellic acid of at least 5% by weight, 11-keto- β -boswellic acid of at least 1% by weight and acetyl-11-keto- β -boswellic acid of at least 1% by weight.

81. The method of claim 80, wherein the composition comprises β -boswellic acid of 12 to 35% by weight, acetyl- β -boswellic acid of 5 to 35% by weight, 11-keto- β -boswellic acid of 5 to 45% by weight and acetyl-11-keto- β -boswellic acid of 5 to 45% by weight.

82. A method of inhibiting the synthesis of DNA, RNA and/or protein in a human or animal in need of the inhibition, comprising administering a DNA, RNA and/or protein synthesis inhibition effective amount of β -boswellic acid, acetyl- β -boswellic acid, 11-keto- β -boswellic acid or acetyl-11-keto- β -boswellic acid.

83. A method for irreversibly inhibiting the synthesis of DNA in a human or animal in need of the inhibition, comprising administering a DNA synthesis inhibition effective amount of β -boswellic acid, acetyl- β -boswellic acid, 11-keto- β -boswellic acid or acetyl-11-keto- β -boswellic acid.

84. A method for preventing or treating a lymphoproliferative disease in a human or animal in need of the prevention or treatment, comprising administering a lymphoproliferative disease preventing or treating effective amount of β -boswellic acid, acetyl- β -boswellic acid, 11-keto- β -boswellic acid or acetyl-11-keto- β -boswellic acid.

85. A method for preventing or treating an autoimmune disease in a human or animal in need of the prevention or treatment, comprising administering an autoimmune disease preventing or treating effective amount of β -boswellic acid, acetyl- β -boswellic acid, 11-keto- β -boswellic acid or acetyl-11-keto- β -boswellic acid.

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